

WHAT IS CLAIMED IS:

1. A method for grafting an unsaturated monomer to a polysaccharide and depolymerizing the polysaccharide, said method comprising the steps of:
 - a) mixing the unsaturated monomer and the polysaccharide; and
 - b) irradiating the polysaccharide and monomer mixture of step a) with a dose of electron beams effective to graft the monomer to the polysaccharide and depolymerize the grafted polysaccharide.
2. The method of claim 1, wherein the unsaturated monomer is an alkyl monomer.
3. The method of claim 2, wherein the polysaccharide is guar.
4. The method of claim 1, wherein the polysaccharide is dispersible in water.
5. The method of claim 1, wherein the polysaccharide is a modified cellulose.
6. The method of claim 1, wherein the polysaccharide is selected from the group consisting of guar, cationic guar, nonionic guar, locust bean gum, tara gum, amylose, amylopectin, xanthan and xanthan gum.
7. The method of claim 1, wherein the unsaturated monomer has a functional group.
8. The method of claim 1, wherein the unsaturated monomer is a vinyl monomer.

9. The method of claim 8, wherein the vinyl monomer contains at first one monomer group selected from carboxylate, phosphate and sulfonate groups.
10. The method of claim 8 wherein the vinyl monomer is methacrylamidopropyltrimethylammonium chloride.
11. The method of claim 8, wherein the vinyl monomer contains at least one cationic group selected from quarternary ammonium.
12. A polysaccharide, grafted with an unsaturated monomer, said grafted polysaccharide being dispersible in water.
13. The grafted polysaccharide of claim 12, wherein the polysaccharide is selected from the group consisting of modified cellulose, galactomannan and xanthan.
14. The grafted polysaccharide of claim 12, wherein the polysaccharide is a modified cellulose.
15. The grafted polysaccharide of claim 12, wherein the unsaturated monomer is a vinyl monomer.
16. The grafted polysaccharide of claim 13, wherein the vinyl monomer is selected from a carboxylated vinyl monomer, a sulfonated vinyl monomer, a phosphonated vinyl monomer and a quarternary ammonium vinyl monomer.

17. The grafted polysaccharide of claim 12, wherein the vinyl monomer contains a quarternary ammonium function.
18. The grafted polysaccharide of claim 12, wherein the polysaccharide is selected from the group consisting of guar, cationic guar, nonionic guar, locust bean gum, tara gum, xanthan gum and amylose.
19. The grafted polysaccharide of claim 12, wherein the polysaccharide is selected from the group consisting of guar and hydroxypropyl guar.
20. A cosmetic composition comprising the grafted polysaccharide of claim 12.